

## CLAIMS

What is claimed is:

1. A portable data terminal for use in a portable data collection network including a backbone network and a plurality of access points coupled to the backbone network, the portable data terminal comprising:
  - a keypad for inputting data;
  - a barcode reader for inputting barcode information;
  - an RF transceiver for wirelessly communicating at least one of data input via the keypad and barcode information read by the barcode reader to the backbone network by way of at least one of the plurality of access points;
  - a speaker; and
  - a voice circuit operatively coupled to the RF transceiver and the speaker for receiving voice data via the RF transceiver, and for converting the voice data into a voice signal which is output through the speaker.
2. The portable data terminal of claim 1, wherein the voice circuit comprises a memory for storing voice data received via the RF transceiver.
3. The portable data terminal of claim 2, wherein the memory stores voice data which is acquired as multiple voice messages.
4. The portable data terminal of claim 3, further comprising a display for displaying indicia of the multiple voice messages, and means for permitting an operator to select at least one of the multiple voice messages to be output through the speaker based on the displayed indicia.
5. The portable data terminal of claim 1, further comprising a microphone, and wherein the voice circuit is operatively coupled to the microphone to convert a voice signal output from the microphone to outgoing voice data which is transmitted by the RF transceiver.
6. The portable data terminal of claim 1, wherein a device coupled to the backbone network initially stores the voice data intended for the portable data terminal, and the portable data terminal periodically polls the device in order to prompt the device to transmit the voice data to the portable data terminal.

7. The portable data terminal of claim 6, wherein the device is a host computer coupled to the backbone network.

8. A portable data terminal for use in a portable data collection network including a backbone network, and a plurality of access points coupled to the backbone network, the portable data terminal comprising:

input means for inputting data;

an RF transceiver for communicating with at least one device coupled to the backbone network via at least one of the plurality of access points, the RF transceiver being configured to communicate information in packets in accordance with a carrier sense multiple access (CSMA) protocol;

a speaker;

a microphone; and

a control circuit, operatively coupled to the input means, the RF transceiver, the microphone, and the speaker, for selectively enabling the RF transceiver to transmit first data based on data input via the input means and second data based on a voice signal provided via the microphone, and for converting voice data received by the RF transceiver into a voice signal which is output through the speaker.

9. The portable data terminal of claim 8, wherein the portable data terminal automatically transitions to a receive telephone call state upon receiving a ring packet from the at least one device via the RF transceiver, the ring packet containing indicia representing a request that the portable terminal enter a conversation state in which voice data may be exchanged between the portable data terminal and the at least one device via the RF transceiver, and wherein the portable data terminal in the receive telephone call state generates at least one of an audible ring indicator and a visual ring indicator.

10. The portable data terminal of claim 9, wherein the portable data terminal transitions out of the receive telephone call state in response to a hang-up packet received from the at least one device via the RF transceiver, the hang-

up packet including indicia representing a request the that portable terminal transition out of the receive telephone call state.

11. The portable data terminal of claim 9, wherein the portable data terminal transitions out of the receive telephone call state in response to an operator input representing a request by the operator that the portable terminal transition out of the receive telephone call state.

12. The portable data terminal of claim 8, wherein the portable data terminal initiates a voice communication link with the at least one device by transmitting a ring packet to the at least one device via the RF transceiver, the ring packet containing indicia representing a request that the at least one device transition to a conversation state in which voice data may be exchanged between the portable data terminal and the at least one device via the RF transceiver.

13. The portable data terminal of claim 12, wherein the at least one device comprises another portable data terminal.

14. The portable data terminal of claim 12, wherein the portable data terminal itself transitions to the conversation state upon receiving an answer packet from the at least one device via the RF transceiver, the answer packet including indicia representing that the at least one device has transitioned to the conversation state.

15. The portable data terminal of claim 14, wherein the answer packet further comprises voice data which is converted into a voice signal by the control circuit.

16. The portable data terminal of claim 8, further comprising a push-to-talk input for controlling the inputting of the second data via the microphone and the transmitting of the second data via the RF transceiver.

17. A portable data terminal for use in a portable data collection network including a backbone network and a plurality of access points coupled to the backbone network, the portable data terminal comprising:

a keypad for inputting data;

a barcode reader for inputting barcode information;  
an RF transceiver for wirelessly communicating at least one of data input via the keypad and barcode information read by the barcode reader to the backbone network by way of at least one of the plurality of access points;  
a microphone; and  
a voice circuit operatively coupled to the RF transceiver and the microphone for transmitting voice data obtained from the microphone via the RF transceiver.

18. The portable data terminal of claim 17, wherein the voice circuit is operative to transmit the same voice data to a plurality of different devices via the RF transceiver.

19. The portable data terminal of claim 14, wherein in the conversation state the voice data is digitized and compressed prior to being included in packets and transmitted by the RF transceiver.

20. A portable data terminal, comprising:  
input means for inputting data;  
an RF transceiver for transmitting data input via the input means to a remote location;  
a memory;  
a speaker;  
a control circuit, operatively coupled to the RF transceiver and the speaker, for receiving voice data via the RF transceiver, storing the voice data in the memory as at least one voice mail message, and for selectively converting the at least one voice mail message to a voice signal which is output through the speaker;  
a display for displaying indicia of the at least one voice mail message stored in the memory; and  
an input operatively coupled to the control circuit for selecting the at least one voice mail message to be converted based on the indicia on the display.

21. The portable data terminal of claim 20, wherein the display presents the indicia on the display as lines of text, with different lines representing different voice mail messages.

22. The portable data terminal of claim 21, where the input controls the position of a cursor shown on the display in relation to the lines of text.

23. A portable data collection network, comprising:  
a hardwired backbone network;  
a plurality of access points coupled to the backbone network;  
a plurality of portable data terminals, each of the plurality of portable data terminals comprising:

input means for inputting data;

an RF transceiver for communicating with at least one device coupled to the backbone network via at least one of the plurality of access points, the RF transceiver being configured to communicate information in packets in accordance with a carrier sense multiple access (CSMA) protocol;

a speaker; and

a control circuit, operatively coupled to the input means, the RF transceiver, and the speaker, for selectively enabling the RF transceiver to transmit data based on data input via the input means and to convert voice data received by the RF transceiver into a voice signal which is output through the speaker.

24. The portable data collection network of claim 23, wherein each of the plurality of portable data terminals further comprises a microphone operatively coupled to the control circuit, the control circuit selectively enabling the RF transceiver to transmit voice data based on an output of the microphone.

25. The portable data collection network of claim 24, wherein the control circuit of each portable data terminal is operative to effect conference calling between at least three different portable data terminals.